Supporting Online Material for

Exploration of Victoria Crater by the Mars Rover Opportunity

S. W. Squyres,* A. H. Knoll, R. E. Arvidson, J. W. Ashley, J. F. Bell III, W. M. Calvin, P. R. Christensen, B. C. Clark, B. A. Cohen, P. A. de Souza Jr., L. Edgar, W. H. Farrand, I. Fleischer, R. Gellert, M. P. Golombek, J. Grant, J. Grotzinger, A. Hayes, K. E. Herkenhoff, J. R. Johnson, B. Jolliff, G. Klingelhöfer, A. Knudson, R. Li, T. J. McCoy, S. M. McLennan, D. W. Ming, D. W. Mittlefehldt, R. V. Morris, J. W. Rice Jr., C. Schröder, R. J. Sullivan, A. Yen, R. A. Yingst

*To whom correspondence should be addressed. E-mail: squyres@astro.cornell.edu

Published 22 May 2009, *Science* **324**, 1058 (2009)
DOI: 10.1126/science.1170355

This PDF file includes:

Figs. S1 to S4

Supplemental Material:

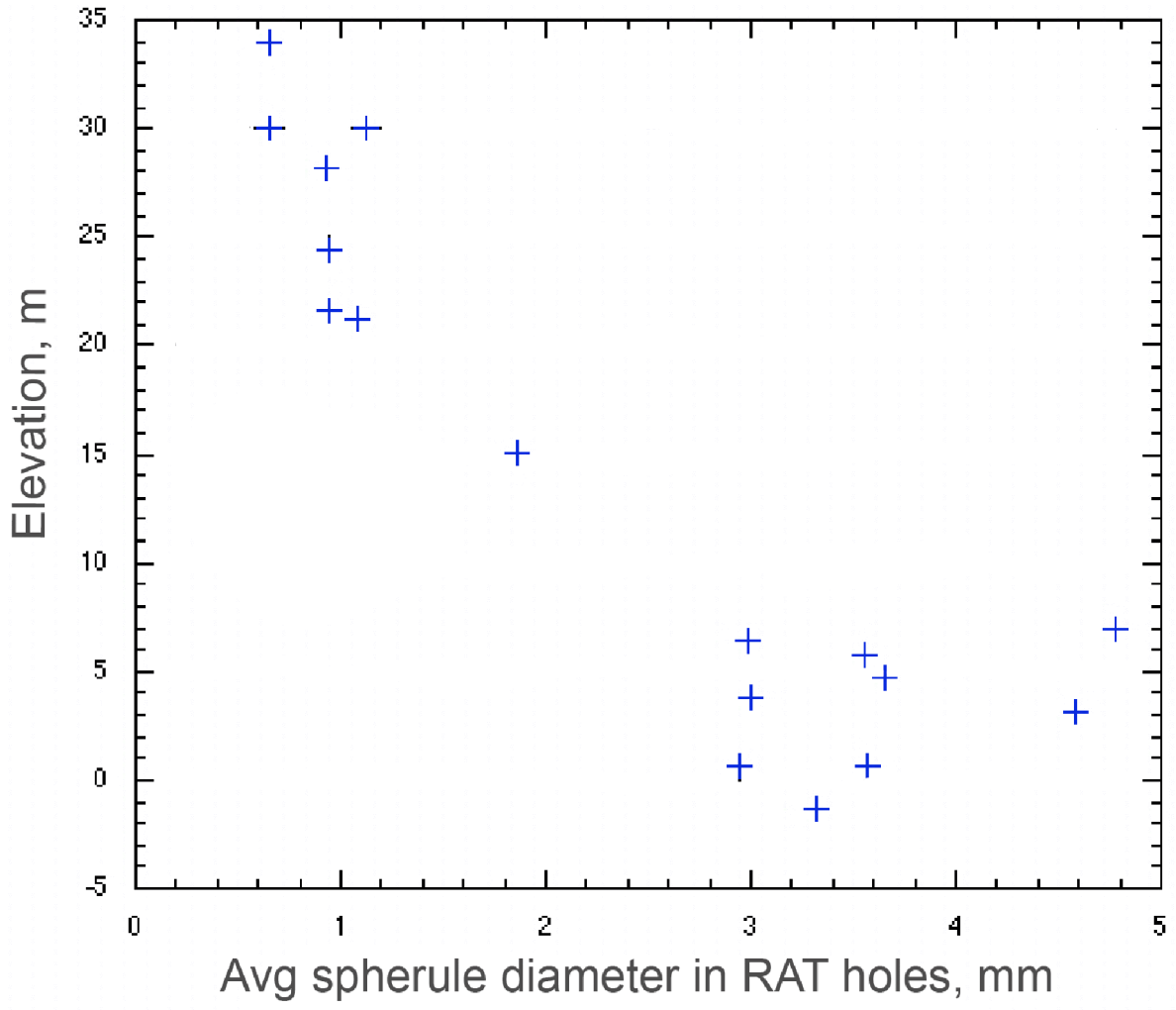

Fig. S1. Diameter of spherules observed in RAT-abraded rock surfaces vs. elevation along Opportunity's southward traverse. The landing site elevation is defined to be 0 m. Elevations were determined from a combination of least squares adjusted rover telemetry data, rover image-derived traverse data, and MOLA data. Elevation errors are within 3m.

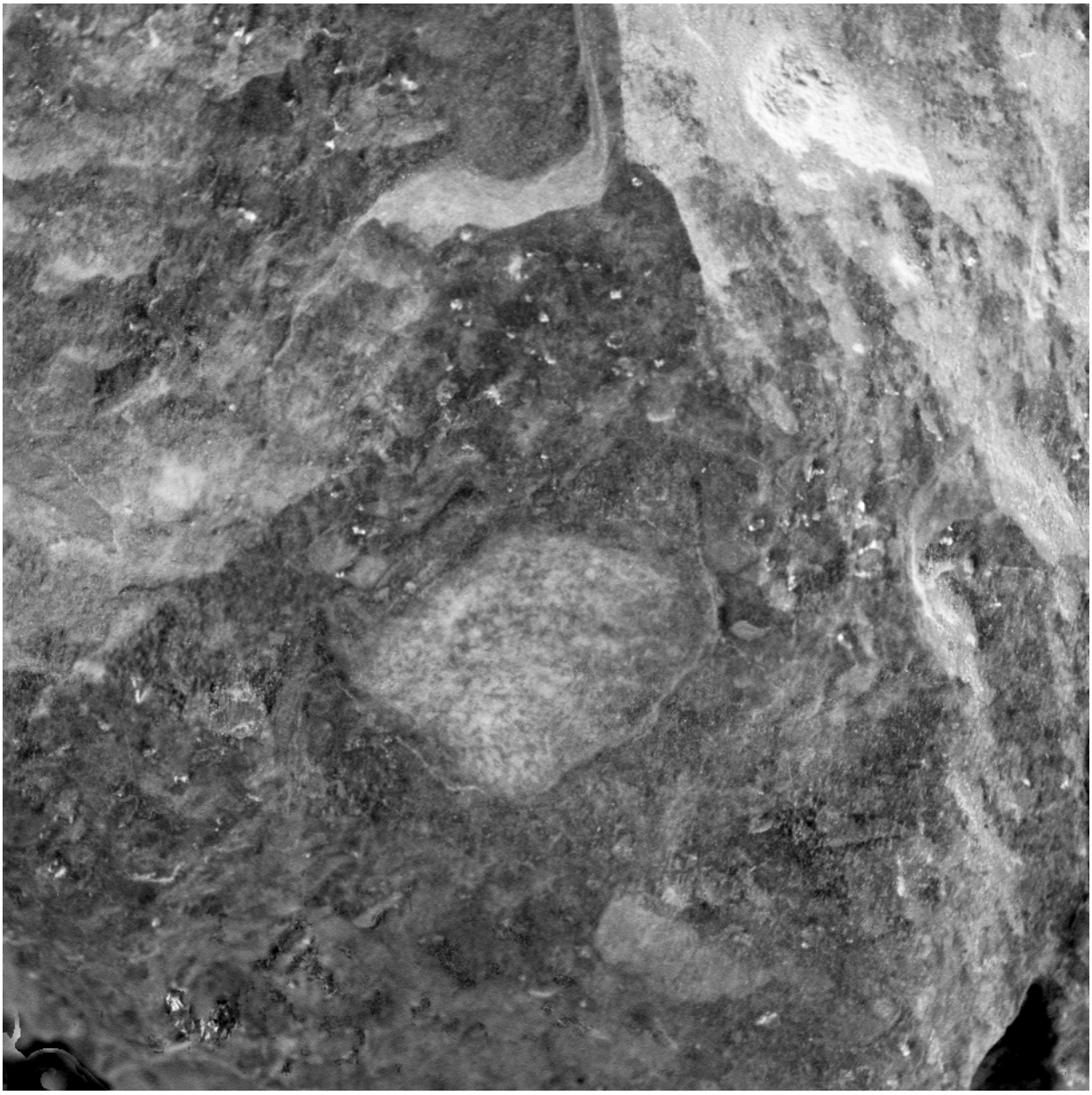

Fig. S2. MI image of Santa Catarina. 3 cm across, merging the best-focused portions of five MI images acquired on Sol 1055.

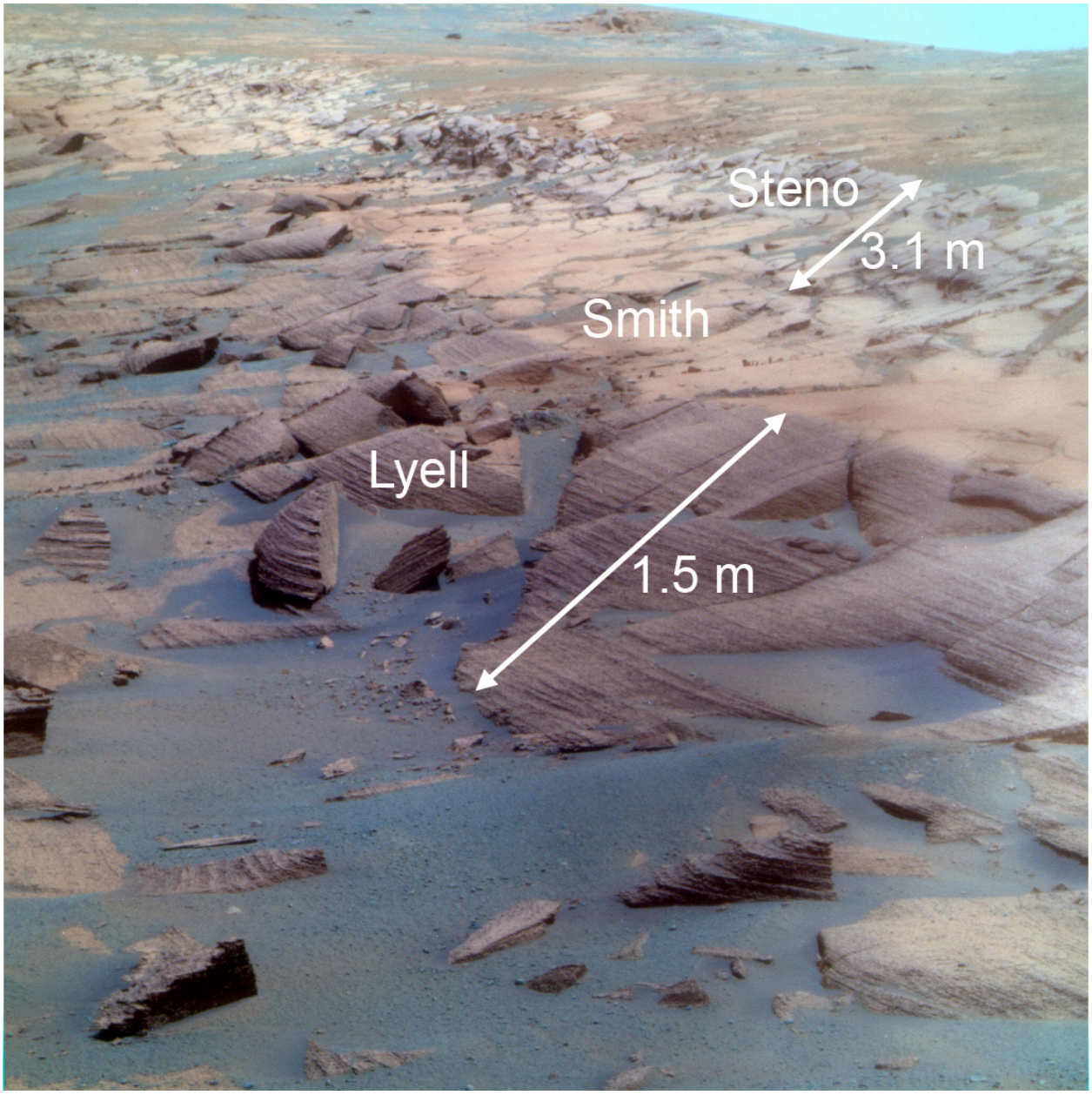

Fig. S3. Pancam false color image (red = 673 nm, green = 535 nm, blue = 432 nm) of rocks at Duck Bay, showing the distinctive color stratigraphy observed ubiquitously in the upper bedrock walls of Victoria crater (sequence p2422, Sol 1426).

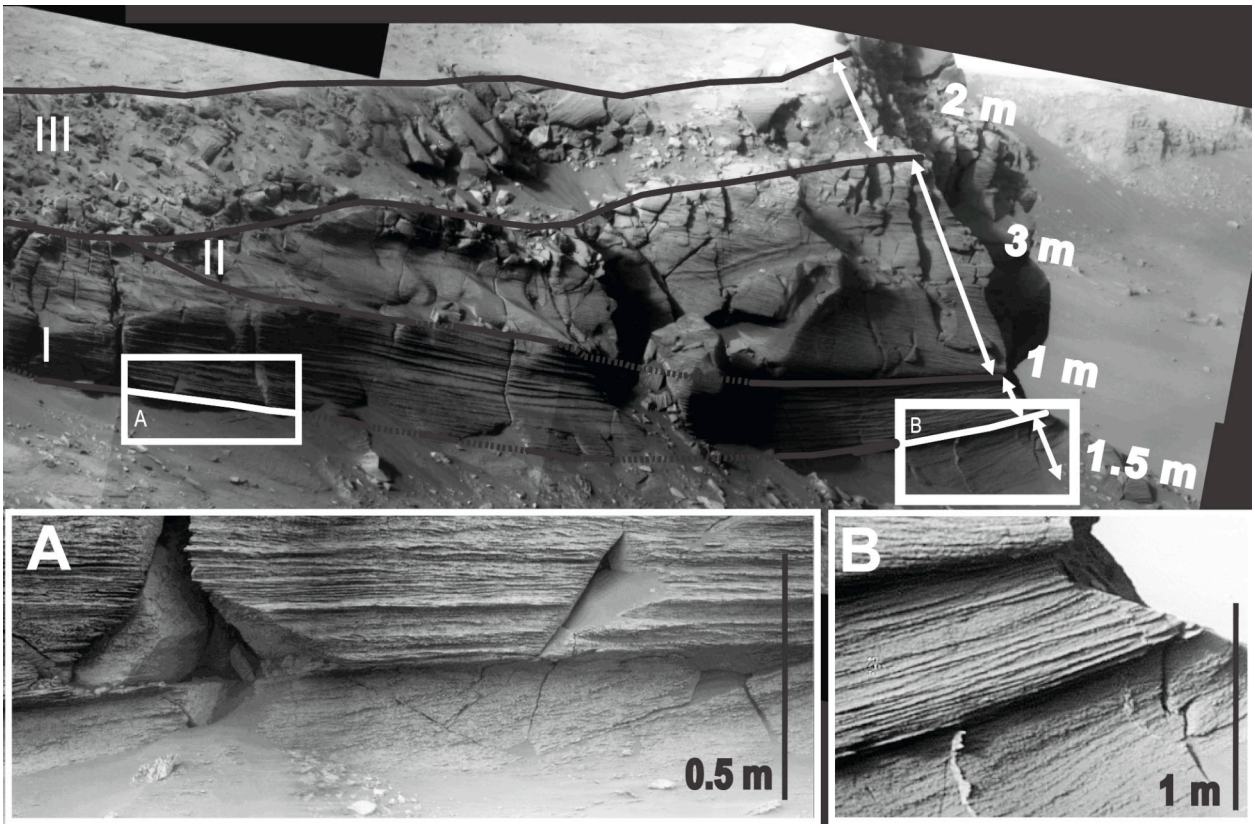

Fig. S4. Pancam "super-resolution" image of Cape Verde (sequence p2396, Sol 1392). Unit I is interpreted as thickly-bedded dune toeset laminae, and unit II as dune foreset cross-stratification. Unit III is impact breccia. Insets A and B show a probable erosional contact; this can also be interpreted as a deflation surface or set boundary in a larger dune complex. Note truncated fracture fill in inset B, providing evidence for an erosional surface.